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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,821	10/23/2003	William F. Graebe JR.	10286-008-43048	6330

23489 7590 10/21/2004

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EXAMINER
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SINGH, SUNIL

ART UNIT	PAPER NUMBER
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3673

DATE MAILED: 10/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/691,821	Applicant(s) GRAEBE, WILLIAM F. 	
	Examiner Sunil Singh	Art Unit 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

**DETAILED ACTION*****Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "25" has been used to designate both overinflation sensor and reed switch (see page 13). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show reference character (106) as described in the specification (page 22). Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be

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removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3,7-8,15,18,19,22,23,24-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Graebe, Jr. (US 5473313):

Graebe, Jr. discloses an air cushion control system comprising an air chamber sensor (34) including an air chamber (see Fig. 1), a bottom out sensor (80,88), and an overinflation sensor (82,90), an air pump (40) to inflate the air chamber, an air valve (52,62) to release air from the air chamber, means (46,50,54,58) to connect the air cushion control system to an air cushion (see col. 3 line 35+) and a microprocessor (74)

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to control the inflation and the release of the air from the air chamber. A housing (30,12). An alarm is sounded when in the bottom-out condition (col. 4 line 15).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4-5, 16,17,20,21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graebe, Jr. in view of Ford et al. or Iskra, Jr. et al. (US 4711275 or 5487197)

Graebe, Jr. discloses the invention substantially as claimed. However, Graebe, Jr. is silent about measuring a time period when the cushion is in a bottom-out condition before sounding an alarm. Ford et al. teaches measuring a time period when a cushion is in a bottom-out condition before sounding an alarm (see col. 4 line 31). Iskra, Jr. et al. teaches measuring a time period when a cushion is in a bottom-out condition before sounding an alarm (see col. 4 line 15+). It would have been considered obvious to one of ordinary skill in the art to modify Graebe, Jr. to include the measuring of the time period when the cushion is in a bottom-out condition as taught by either Ford et al. or Iskra, Jr. et al. in order to control the amount of time it is considered to be safe to have a patient positioned in the bottom-out condition.

7. Claims 6,9, are rejected under 35 U.S.C. 103(a) as being unpatentable over Graebe, Jr. in view of Vaughn et al. Iskra, Jr. et al. (US 5657499 or 5487197)

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Graebe, Jr. discloses the invention substantially as claimed. However, Graebe, Jr. is silent about sounding an alarm when the battery is low. Vaughn et al. teaches to sound an alarm when the battery is low (col. 4 line 15+). Iskra, Jr. et al. teaches sounding an alarm when the battery is low (see col. 4 line 15+). It would have been considered obvious to one of ordinary skill in the art to modify Graebe, Jr. to include sounding the alarm when the battery is low as taught by either Vaughn et al. or Iskra, Jr. et al. in order to notify the patient so that they can change the battery.

8. Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graebe, Jr..

Graebe, Jr. discloses the invention substantially as claimed. However, Graebe, Jr. is silent about the alarms being either LED or visual read out display. Alarm means that are either LED or visual read out display are notoriously old and well known. It would have been considered obvious to one of ordinary skill in the art to modify Graebe, Jr. to have his alarm means be either LED or visual read out display instead of an audible means since such a modification would reduce noise associated with audible alarms.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil Singh whose telephone number is (703) 308-4024. The examiner can normally be reached on Monday through Friday 8:30 AM-5:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on (703) 308-2978. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sunil Singh

  
Primary Examiner  
Art Unit 3673

SS

10/14/04